

Provetro[®]



Date of establishment: Safety data sheet/ EG-Sicherheitsdatenblatt
11/02/03
Revision date:

Product/ Product group: **Protection varnish against splinters**

1.1 Substance/Preparation and Company Name

1.2 Information on the product

1.3 Information on manufacturer/Supplier

Supplier: **Tiffany Glaskunst GmbH**
Street: **Helleforthstr. 18-20**
UIP Code/town: **D-33758 Schloß Holte Stukenbrock**
Tel.: **+49 5207 91280**
Fax.: **+49 5207 912840**
e-mail: **tgk@tgk.de**
Internet: **http://www.tgk.de**

Telephone number in emergency cases: 05207-9128-0

2. **Composition/Information on Ingredients :**

Chemical characteristics:

Description:

Aliphatic polyisocyanate in aromatic carbon hydrogens (portion of monomeric Isophorondiisocyanate < 0,5 %)

Dangerous ingredients:

CAS-No.:	Designation according to EC guidelines	Portion	Unity	Symbol	R-phrases
001330-20-7	Xylol (Isomeric mixture)	ca. 6	%	Xn	10-20/21-38
004098-71-9	3-Isocyanatmethyl-3,5, 5-trimethylcyclohexylisocyanate, Isophorondiisocyanate	< 0,5	%	T	23-36/37/38-42/43
000108-65-6	2-Methoxy-l-methylethylacetate	< 15	%	Xi	10-36

3. **Possible hazards:**

Hazard designation:

Inflammable.

Information pertaining to particular dangers for men and environment:

Concerning hypersensitive persons reactions as coughing or breathing difficulties can already appear already in case of low isocyanate concentrations. Therefore, provide for adequate room ventilation.

4. **First Aid Measures:**

General information:

Remove contaminated or soaked clothes immediately. If discomfort persists, seek medical attention.

Inhalation:

Fresh air. If discomfort persists, seek medical attention.

Eye contact:

Rinse thoroughly with plenty of water, also under eyelids.
Seek medical attention immediately.

Skin contact:

Wash away with plenty of water. If skin irritation persists, seek medical attention.

Ingestion:

Do not induce vomiting
Seek medical attention immediately.
Attention! Danger of aspiration.

Information for doctor:

Decision whether vomiting should be induced or not should be made by the doctor.

5. Fire fighting measures:

Appropriate extinguishing media:

Foam, carbon dioxide (CO₂), dry extinguishing media, water spray.

Unadequate extinguishing media for safety reasons:

Water jet.

Special hazards caused by the material, its combustion products or flue gases:

In case of fire, the following substances can be generated:
Carbon monoxide, nitrogen oxides, isocyanates and traces of cyanogen hydrogen.
Vapour/air mixture is explosive also in empty uncleaned containers. Vapours are heavier than air and spread on ground.

Special protection equipment for fire fighting:

Wear independent respiratory protection equipment in case of fire.

Additional information:

Cool container with water spray.
Remove all sources of ignition.

6. Accidental release measures:

Personal precaution measures:

Provide for adequate ventilation.
In case of generation of vapours, use respiratory protection device.
Do not smoke.

Environmental protection measures:

Do not let pass into surface water or canalisation.
Clean contaminated surfaces thoroughly.

Measures for cleaning up/collecting:

Take up with liquid-binding material (e.g. sand, silikagel, acid binding agent, universal binding agent). Shovel up and put in appropriate containers for waste disposal.

Additional information:

Do not close container gas-tight.

Due to the reaction with wet air and/or water, pressure can increase in container by carbon dioxide.

7. **Handling and storage:**

Handling:

Information on secure handling:

Keep containers firmly locked.
Provide for good ventilation and exhaustion at working place.
Do not eat, drink or smoke.

Information on protection against fire and explosion:

Keep product and emptied containers away from heat and sources of ignition.
Take measures against electrostatic chargement.
Vapours are heavier than air and spread on the ground.

Storage:

Requirements for storage rooms and containers:

Store container firmly locked at dry, cool and well-ventilated place.

Information on storage together with other substances:

Do not store together with water, alcohols, amines.
Keep away from food, drinks and fodder.

Storage class:

3A (VCI)

8. **Exposure controls and personal protection:**

Information on the design of technical plants:

Provide for sufficient ventilation, especially in closed rooms.

Ingredients with limit values on working place that have to be controlled:

CAS-No.	Designation of the substance	Method	Value	Unity
004098-71-9	3-Isocyanatmethyl-3,5, 5-tri-methylcyclohexy-lisocyanate, Isophorondiisocyanate	MAK 1994	0,01	Ppm
001330-20-7	Xylol (Isomeric mixture)	MAK 1994	100	Ppm
000108-65-6	2-Methoxy-1-methylethylacetate	MAK (1994)	50	Ppm

Personal protection equipment:

General protection and hygiene measures:

Wash hands before breaks and immediately after handling of the product. Do not eat, drink or smoke at utilisation. Avoid contact with skin, eyes and clothes.

Respiratory protection:

Wear respiratory protection equipment in case of insufficient ventilation.

Hand protection:

Impermeable gloves.

Eye protection:

Tightly-fitting protection goggles.

Body protection:

Working clothes with long sleeves.

It is a requirement of industrial hygiene to avoid contact with dissolvants in general by appropriate protection measures as far as possible.

9. Physical and chemical properties:

▪ Form:	Viscous/thixotropic
▪ Colour:	Clear
▪ Odour:	aromatic
▪ Boiling point/Boiling range (in °C):	ca. 130 °C
▪ Melting/Melting range (in °C):	not specified
▪ Flash point:	36 °C
▪ Solubility in water:	not miscible
▪ Explosion danger:	
▪ Density (at 20 °C):	1,05 g/ml
▪ Steam pressure (at 30 °C):	
▪ Viscosity :	thixotropic
▪ Portion of dissolvants:	ca. 35 %

10. Stability and reactivity:

Conditions to avoid/thermic decomposition:

Vapour/air mixtures are explosive at stronger heating. Explosive gases can be released at heating.

Products to avoid:

Alcohols
Water
Amines

Dangerous decomposition products:

Carbon monoxide, nitrogen oxides, isocyanate and traces of hydrogen cyanide.

Additional information:

No decomposition in case of appropriate storage and utilisation.

11. Toxicological information:

Experiences at humans:

Concerning hypersensitive persons, reactions as coughing and breathing difficulties can appear already at low isocyanate concentrations. Therefore, provide for good room ventilation.

Repeated or permanent contact can irritate eyes and skin.

Additional information:

Inhalation of the vapour in high concentrations can irritate the respiratory system and cause narcotic effects.

12. Ecological information:

General notes:

Do not let pass into surface water or canalisation. Water hazard.

Additional information:

Product can be sedimented mechanically in water treatment plants.

13. Disposal considerations:

For the material/residues

Recommendation:

Recycling is to be preferred to waste disposal. Can be incinerated adhering to local official regulations.

EAK-Code No.

57202

For contaminated packing:

Give empty container to local recycling, recovery or waste disposal system.

14. Transport information:

The good is dangerous for transport according to transport regulations.

Exception:

LIMITED QUANTITIES:

Within the following limits, the product is classified as not dangerous for transport:

Lower limit: 5 Ltrs.

Upper limit: 45 Ltrs.

- **Road transport ADR/RID and GGVS/E**

Class:	3
Number/Letter:	31c
Designation of the good: 1993	Inflammable, liquid substance, contains aromatic carbon hydrogens
Bemerkungen:	Viscous substance - - Freigestellt in Gefäßen mit einem Fassungsvermögen bis 450 l (Rn 2301, Abschnitt E, Bemerkung) ??

- **Sea transport IMDG/GGVSee -**

Class:	3.3
UN-No.:	1993
Packing group:	III
Ems-No. :	3-07
Marine Pollutant:	no
Proper technical name:	Flammable liquid, n.o.s.
Notes:	(cont. hydrocarbons)

- **Air transport ICAO-TI und IATA-DGR - Klassifizierung:**

CAO-IATA-class:	3
UN-No.:	1993
Packing group:	III
Proper technical name:	Flammable liquid, n.o.s./PAC 309 (60 L), CAC 310 (220 L)
Bemerkungen:	(cont. hydrocarbons)

15. Regulatory information:

Designation according to EC guidelines:

Inflammable

Code letter and hazard designation of the product:

Risk phrases:

10 inflammable

Contains isocyanate. Adhere to information of manufacturer.

Safety phrases:

2 keep out of reach of children.
46 in case of ingestion, seek medical attention immediately and
show packing or label.
47

TA-air:

Class: I/II/III
Number: 3.1.7.
Portion M %: < 0,5/<6/<25

Water hazard class:

2 (self-assessment of manufacturer)

16.

Additional Information:

Information in section 4-8 and 10 – 12 are partly not related to the use and the appropriate application of the product (refer to utilisation instructions), but to the release of greater quantities in case of accidents and irregularities.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Recipients of our product must take responsibility for observing existing laws and regulations.